

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Xiaobao Chen
App. No	: 10/588741
Filed	: October 30, 2007
For	: TELECOMMUNICATIONS
Examiner	: Srinivasa R. Reddivalam
Art Unit	: 2477
Conf No.	: 9666

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellants respectfully request review of the outstanding rejections of the claims from the final Office Action of June 22, 2011, for the above-identified application. No amendments are filed herewith. Enclosed with this Request is a Notice of Appeal.

STATUS OF CLAIMS

As permitted by 37 C.F.R. §§ 41.33(a), 1.116(b)(2), Appellant has submitted an amendment to Claims 10 and 14. Upon entry of this amendment, Claims 1-3, 6-10, and 13-25 appear for review.

REASONS FOR REQUEST

Review of the above-identified application is requested for the following reason:

the Lee reference has been mischaracterized to disclose the claimed tunneling.

Independent Claims 1, 10, and 14, and thereby dependent Claims 2-3, 6-9, 13, 15-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hierarchical Mobile IPv6 mobility management (HMIPv6) ("Soliman") in view of U.S. Patent No. 6,915,325 ("Lee").

Appellant respectfully submits that the Examiner's rejection is improper, at least because no combination of the cited references teaches or suggests all of the claim elements.

The basis for the rejection

The instant claims are directed to a method of operating a network entity at a node intermediate to a mobile node in a foreign network and a correspondent node, wherein the method includes allocating a secondary care-of address to the network entity, sending a packet addressed to the correspondent node from the network entity, wherein the packet has the secondary care-of address as a source address, tunnelling, in a session between the correspondent node and the mobile node, one or more session packets from the correspondent node to the network entity, wherein the session packets have the correspondent node address as the source address and the care-of address as the destination address, receiving the session packets, decapsulating the session packets, and forwarding the decapsulated session packets to the mobile node.

The Examiner asserts that Soliman discloses the feature of allocating a secondary care-of address to the network entity, and discloses the feature of sending a packet, addressed to the correspondent node, from the network entity, wherein the packet has the secondary care-of address as a source address. However, the Examiner concedes that Soliman fails to disclose the remaining features of the claim, including tunnelling, as recited.

To cure this deficiency, the Examiner relies on Lee, stating that it discloses the missing features at column 6, line 66 through column 7, line 7, and specifically notes that the correspondent host (50) and the correspondent agent (60) together form a correspondent node. However, as described below, neither reference teaches Applicant's recited communications.

Soliman does not disclose the specifics of the claimed tunneling, particularly aligning the relationships of the network entities

Soliman describes hierarchical mobility management designed to reduce the amount of signaling between a mobile node, its home agent, and a correspondent node. See Soliman, Abstract. Specifically, Soliman focuses on eliminating delays and disruptions caused when a mobile node transitions between access routers. See Soliman, Introduction. This decrease in delay and disruption is accomplished by minimizing the transmission of binding updates from the mobile node to the home agent and/or the correspondent node. See Soliman, Introduction.

Soliman teaches that use of a mobility anchor point (MAP), which acts as a local home agent, decreases the number of binding updates sent to a home agent and/or to a correspondence node. This benefit is provided in that a mobile node only sends binding updates to the MAP when the mobile node changes locations within the MAP domain. *See Soliman, Page 9, Paragraph 3.* In the event that the mobile node changes MAP domains, then the mobile node may be required to send a binding update to its home agent, as well as to its current correspondent nodes. *See Soliman, Page 21, Paragraph 3.* Thus, to the extent that a binding update is sent to the correspondent node, the binding update is sent from the mobile node and not from the MAP. Accordingly, Soliman does not teach “sending a packet addressed to the correspondent node from the network entity, wherein the packet has the secondary care-of address as a source address” as recited in Claim 1.

Soliman further teaches that as long as the mobile node remains within the MAP domain, a semi-constant CoA (RCoA) is maintained at the MAP and communications collected by the MAP are tunnelled to the mobile node. *See Soliman, Page 25, Paragraphs 3-7.* Thus, Soliman teaches tunnelling exclusively between a mobile node and the MAP. Neither the mobile node nor the MAP is the same as a “correspondent node,” as recited in Claim 1. Accordingly, Soliman does not teach “tunnelling, in a session between the correspondent node and the mobile node, one or more session packets from the correspondent node to the network entity, wherein the session packets have the correspondent node address as the source address and the care-of address as the destination address” as recited in independent Claim 1.

Lee does not disclose the specifics of the claimed tunneling, particularly aligning the relationships of the network entities

In order to establish communication, Lee teaches sending binding updates from a home agent (30). *See Lee, Col. 3, Lines 55-62.* As the home agent (30) is not the recipient of “one or more session packets [tunnelled] from the correspondent node” as recited in Claim 1, the home agent (30) is not “the network entity” as also recited in Claim 1. Accordingly, the sending of the binding update from the home agent (30) does not teach “sending a packet addressed to the correspondent node from the network entity, wherein the packet has the secondary care-of address as a source address” as recited in Claim 1.

Moreover, the binding updates taught in Lee are addressed to a correspondent host (50). *See* Lee, Col. 4, Lines 8-11. These updates do not reach the correspondent host (50), but are intercepted by a correspondent agent (60) that has an address distinct from the correspondent host. *See* Lee, Col. 4, Lines 8-11.

The correspondent agent (60) can, in response to intercepting the binding update, create a tunnel between itself and a foreign agent in order to send a data package to the foreign agent. *See* Lee, Figure 3, and Col. 6, Line 67 to Col. 7, Line 7. The data package sent through the tunnel includes the address of the correspondent agent (60), and not the address of the correspondent host (50). *See*, e.g. Lee, Col. 7, Lines 1-7 (the “IP source address of the outer header is set to the correspondent agent”). Thus, the source address of the header on the tunnelled data is different from the address to which the initial binding update is sent, and Lee therefore cannot teach “sending a packet, addressed to the correspondent node” and “tunnelling ... one or more session packets from the correspondent node to the network entity, wherein the session packets have the correspondent node address as the source address.”

Further, Lee does not teach communication to or from a correspondent node that is made of the correspondent host (50) and the correspondent agent (60). While the Examiner has asserted that both the correspondent host (50) and the correspondent agent (60) together act as a correspondent node, the correspondent host (50) and the correspondent agent (60) operate as separate entities in the network as each has a unique address. As the address of the correspondent host (50) is not associated with the correspondent agent (60) and as the address of the correspondent agent (60) is not associated with the correspondent host (50), the communications relevant to the present claims are specifically addressed to, or from one of the correspondent host (50) or the correspondent agent (60) and not to or from a correspondent node that is a combination of these two components. Thus, contrary to the Examiner’s assertions, the communications taught in Lee that are addressed to the correspondent host (50) and addressed from the correspondent agent (60) are not communications to and from a correspondent node, and Lee therefore fails to teach “sending a packet, addressed to the correspondent node” and “tunnelling ... one or more session packets from the correspondent node to the network entity, wherein the session packets have the correspondent node address as the source address” as recited in Claim 1.

Application No.: 10/588741
Filing Date: October 30, 2007

No Combination of the Cited References Teaches All of the Claim Elements

As discussed above, Soliman does not teach the recited tunnelling features, and the Examiner makes no attempt to assert otherwise. Furthermore, Lee cannot cure the deficiencies of Soliman to teach or suggest the recited tunnelling features, as explained above. In addition to this, neither Soliman nor Lee teach or suggest "sending a packet addressed to the correspondent node from the network entity, wherein the packet has the secondary care-of address as a source address." Thus, even if there were a reason to combine the teachings of Soliman and Lee, the combination would not produce the recited communications between the correspondent node and the network entity. As such, the basis for the Examiner's rejection is improper.

Independent Claims 10 and 14 and Dependent Claims 2-3, 6-9, 13, 15-25

Independent Claim 10 and 14 include similar features to those discussed at length above. As such, rejection of these claims in light of the cited references would be erroneous. Dependent Claims 2-3, 6-9, 13, 15-25 depend directly, or indirectly from, and include all of the features of one of independent Claims 1, 10, and 14. Accordingly, rejection of these claims in light of the cited references and the above outlined arguments would be erroneous.

CONCLUSION

Appellant respectfully submits that the ground for the rejection of the claims is improper and should be withdrawn. Accordingly, the claims are in condition for allowance. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,
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